Fire Modeling for Nuclear Engineering Professionals

Executive Summary

The University of Tennessee (UT), College of Engineering, proposes to the U.S. Nuclear Regulatory Commission (NRC) an innovative, one-year program to improve the level of teaching risk-informed, performance-based fire protection engineering (RI-PB FPE) assessment methods to UT Nuclear Engineering students and professionals. Using the engineering assessment methods cited in U.S. NRC Regulations *NUREG 1805, 1824*, *and CR-6850;* and the National Fire Protection Association's *NFPA 805*, the team will deliver a new standalone capstone course entitled "Computer Fire Modeling for Nuclear Engineering Professionals." The project team for this initiative consists of two experienced UT faculty members, each with complementary backgrounds in fire protection and nuclear engineering. The short-term benefits include both the broadening of faculty teaching competencies and a more knowledgeable workforce of student graduates. All lesson plans and educational materials from this course will be made available for peer review and dissemination, as directed by the NRC.

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